

Wildfire Prevention and Risk Mitigation



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California Department of Forestry and Fire Protection (CAL FIRE)

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Commission on Catastrophic Wildfire Cost and Recovery





C240
P112 E
8-19-03
CONTROL



Lassen-
Modoc
Unit

Thinned
Stand





Camp Fire,
2018:

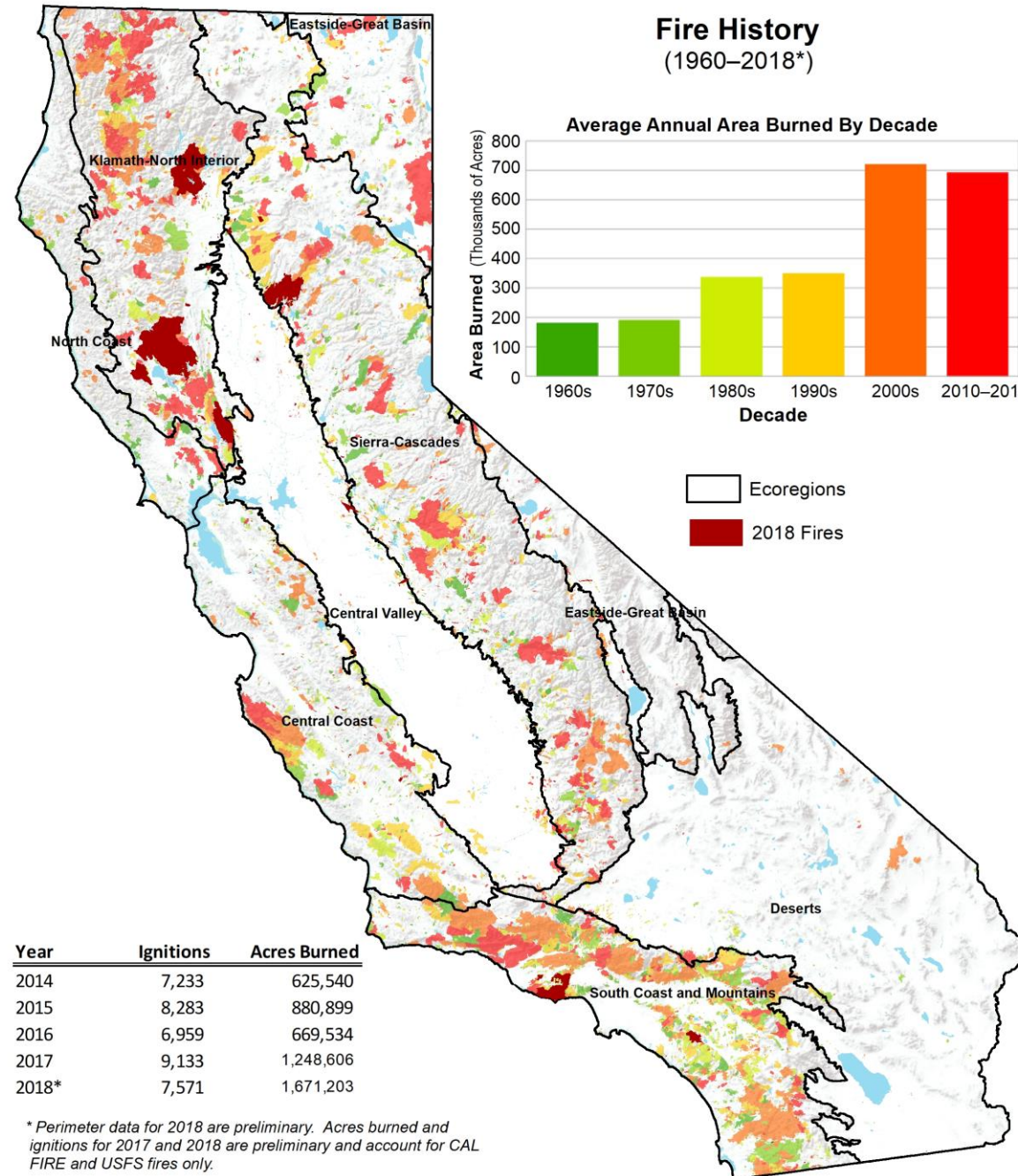
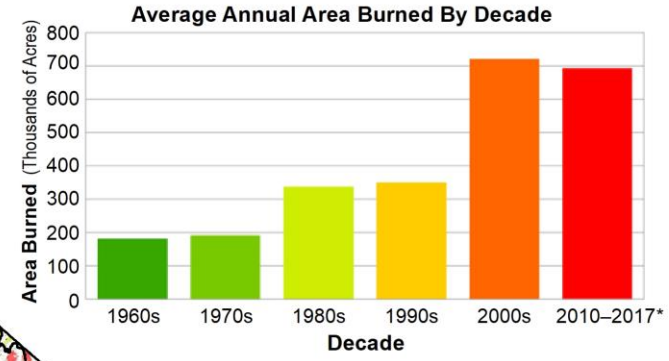
85 fatalities

18, 804 homes
destroyed

Year	Total hurricanes	Made landfall as hurricane in the U.S.	Deaths
1998	10	3	23
1999	8	2	60
2000	8	0	4
2001	9	0	42
2002	4	1	5
2003	7	2	24
2004	9	6	59
2005	15	7	1,518
2006	5	0	0
2007	6	1	1
2008	8	4	41
2009	3	1	6
2010	12	0	11
2011	7	1	44
2012	10	1	83
2013	2	0	1
2014	6	1	2
2015	4	0	3
2016	7	3	36
2017	10	4	147

Source: Insurance
Information Institute from
data supplied by the U.S.
Department of Commerce,
National Oceanic and
Atmospheric
Administration, National
Hurricane Center.

Fire History (1960–2018*)



Year	Ignitions	Acres Burned
2014	7,233	625,540
2015	8,283	880,899
2016	6,959	669,534
2017	9,133	1,248,606
2018*	7,571	1,671,203

* Perimeter data for 2018 are preliminary. Acres burned and ignitions for 2017 and 2018 are preliminary and account for CAL FIRE and USFS fires only.

Executive Order

B-52-18

May 10, 2018

Double the total statewide rate of forest treatments within 5 years to at least 500,000 acres per year.

Increase new landowner agreements and memoranda of understanding, such as Good Neighbor Authority agreements, to accelerate forest restoration thinning and prescribed fire projects across jurisdictions.



Executive Order

N-05-19

January 8, 2019

Actions to reduce the impact of deadly wildfires this year:

- How to quickly deploy personnel and resources for fuels management
- Policy changes to allow more rapid and effective fuels management
- Methods to identify highest risk communities



California Climate Investments

- Total \$200 million in FY 18-19 budget from GGRF
 - \$35 million for 6 prescribed fire crews – start up costs included
 - \$165 million for Forest Health and Fire Prevention
 - \$5 million to Urban and Community Forestry
 - \$5 million to California Conservation Corps
 - Up to \$155 million for Forest Health and Fire Prevention projects including grants
- 5 years “continued” funding in SB901 - Wildfires
 - \$1 billion to be allocated between FY 19-20 and 23-24 (5 years)
 - Prescribed fire crews will expand to 10

CAL FIRE Prescribed Fire Crews

3 Crews in Southern Region, 3 in the Northern Region

- 1 Fire Captain
- 1 Fire Apparatus Engineer
- 1 Forestry Assistant II
- 1 Equipment Operator
- 9 Forestry Technicians

CAL FIRE Vegetation
Management Program projects

Cooperative Projects

- Department of Parks and Recreation
- The Nature Conservancy (TREX)
- Watershed Learning center
- USDA Forest Service
- Other

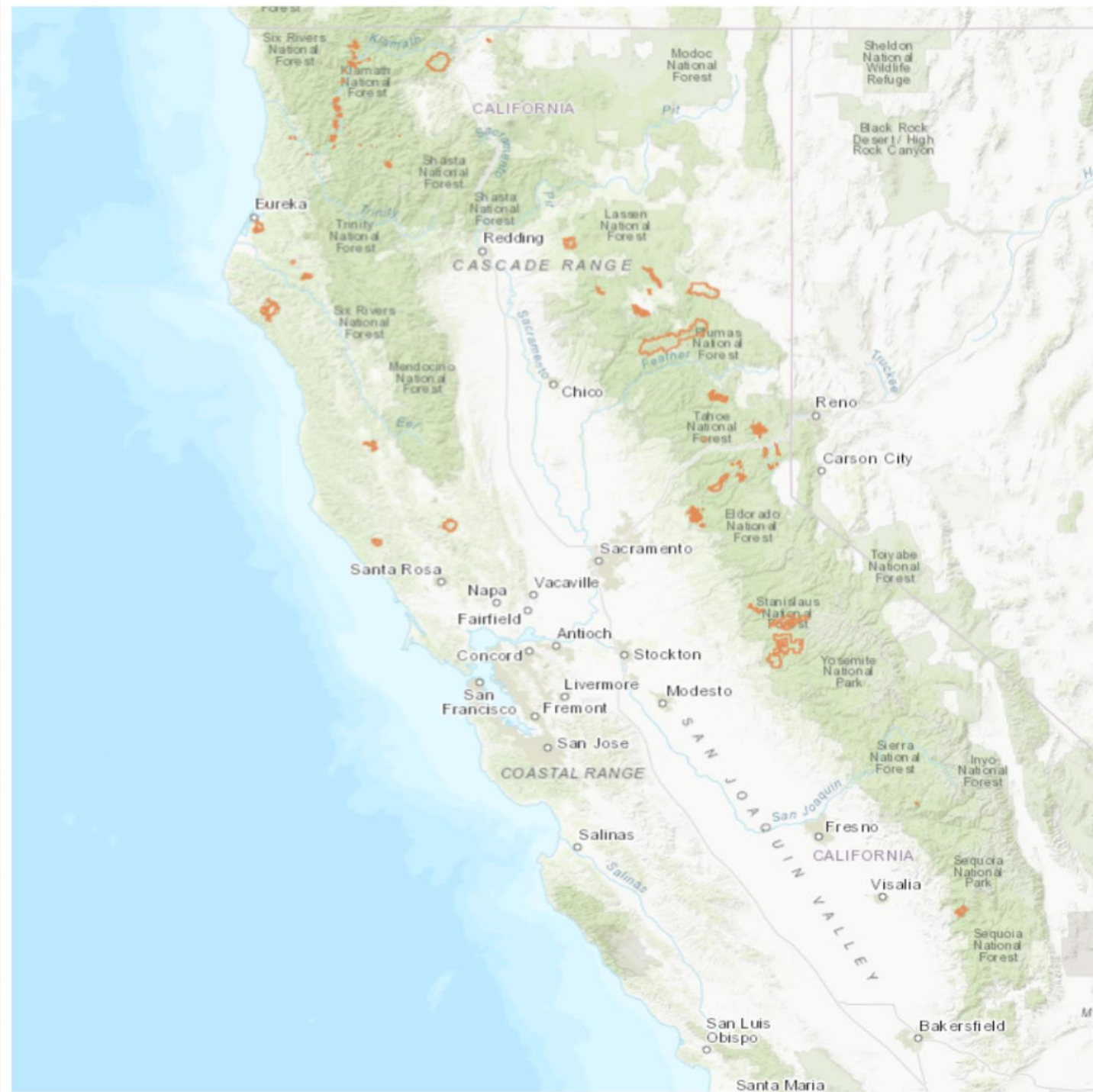


National Guard Crews

- 100 people, or five 20-person crews
- 2 CAL FIRE Fire Captains
- 4 CAL FIRE Firefighter 1's

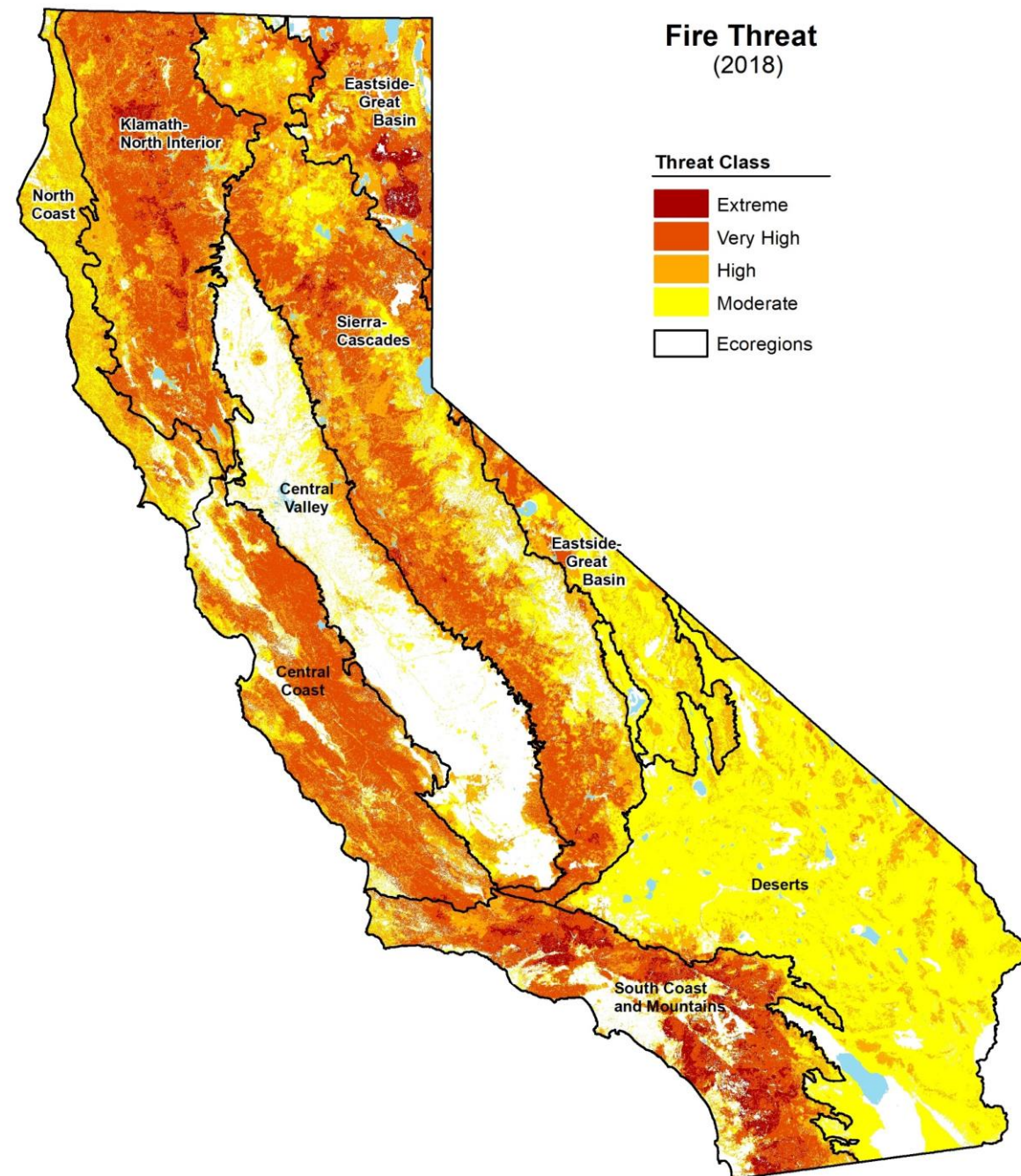
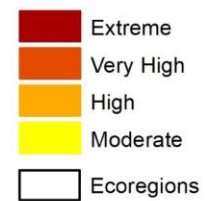
5 crews with each crew having two fire captains and four firefighters to cover staffing needs five days per week.

Start April 1. Three months to a year.

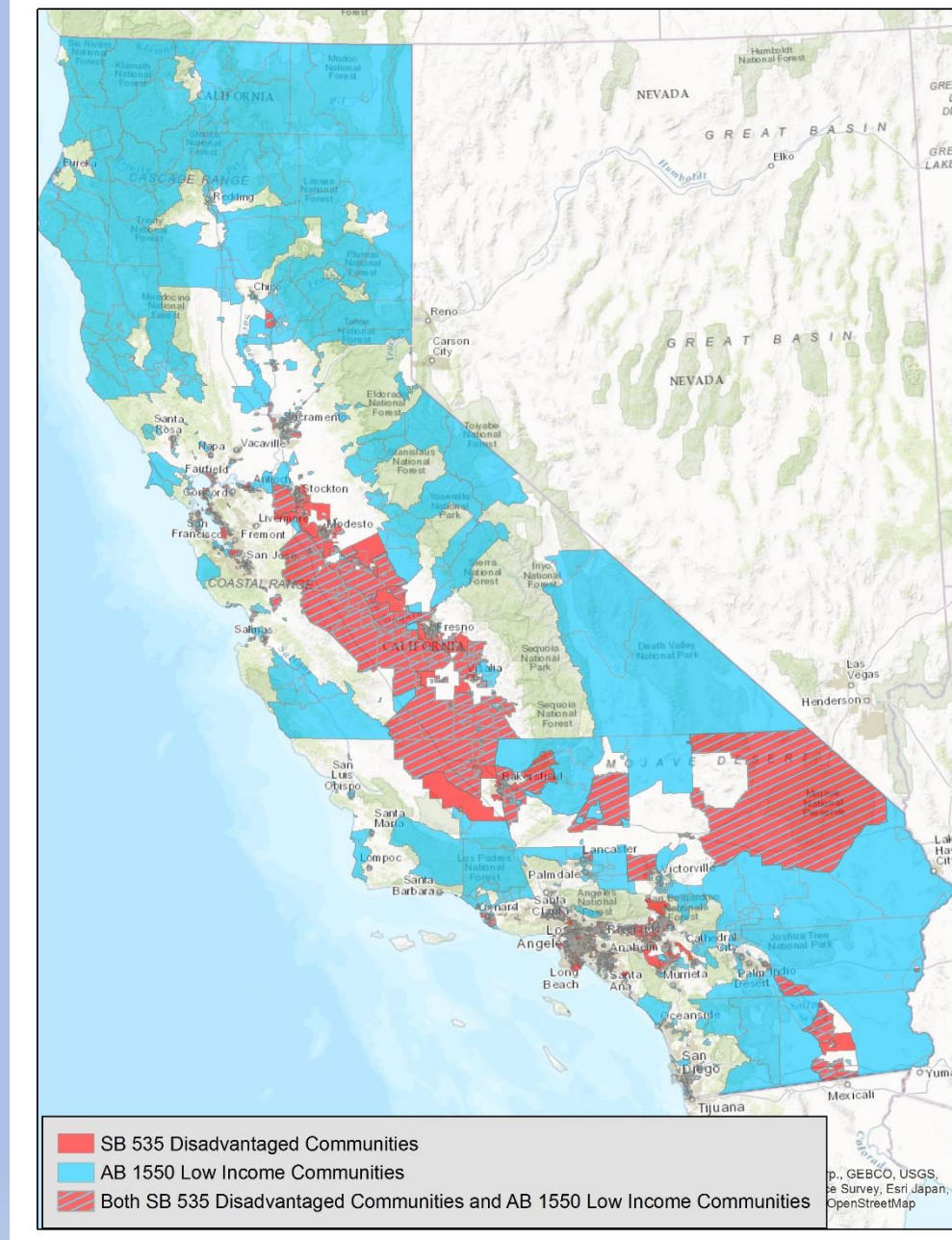


Fire Threat (2018)

Threat Class

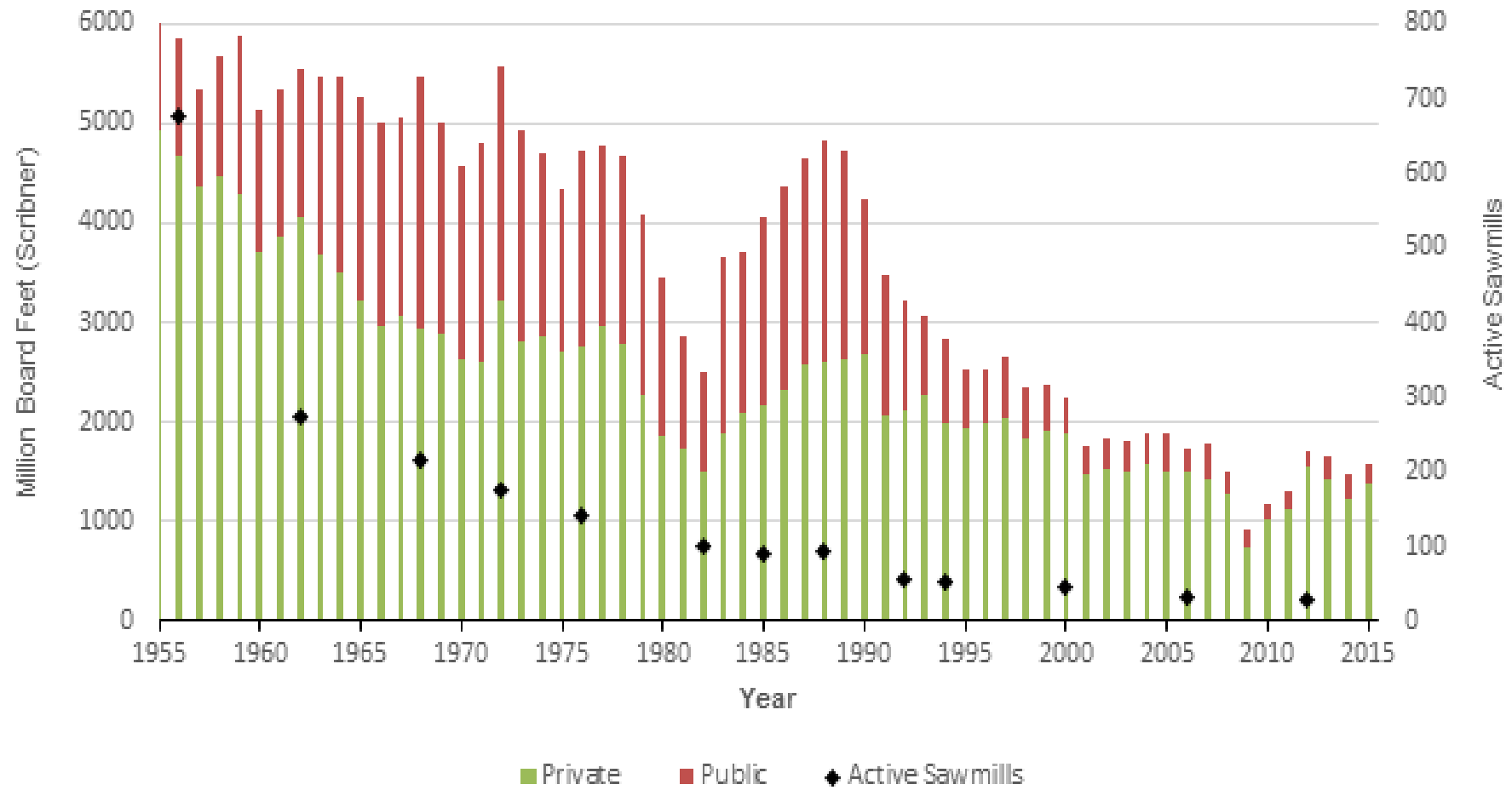


Disadvantaged & Low-income Communities Investments



<https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm>

Public and Private Harvest, and Active Sawmills 1955 - 2015

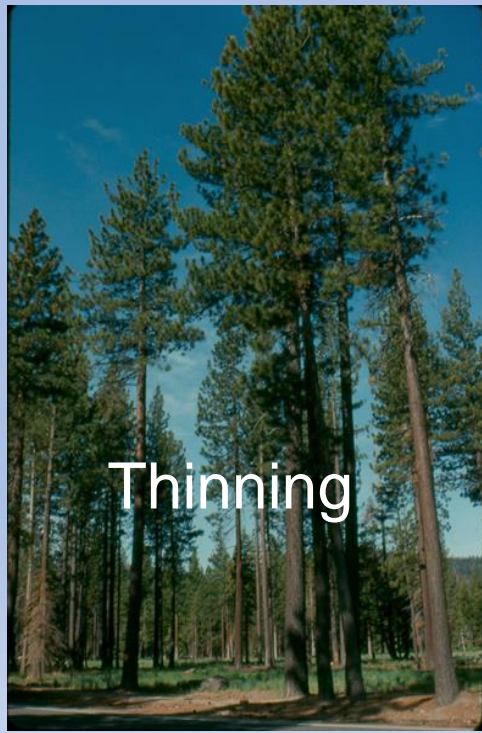




Mechanical Fuels Reduction



Reforestation



Thinning



Prescribed Fire



Timber Harvesting









SPI 1038
Drought
Mortality
Exemption
Tuolumne
County



Area under a
THP that was
declared
substantially
damaged
timberlands
from bark
beetle epidemic

Tuolumne
County

Coordination With the California Public Utilities Commission on Vegetation Management

- MOU, CAL FIRE and CPUC
- Review Utilities' Wildfire Mitigation Plans



- MOU, CAL FIRE and CPUC
Cooperate on mapping
- Review Utilities' Wildfire Mitigation Plans
- High Fire Threat Map Development: wind, dryness, and large fire impacts to communities (Map adopted 1/18)
- Ongoing work on weather reanalysis
2 km downscaled data with emphasis on winds and fuel moistures (expected summer 2019)

Defensible Space and Home Hardening Efforts



Defensible Space and Home Hardening Efforts

Adapting to wildfires means:

- Building homes out of **ember-resistant building materials**.
- Planning **hardened** communities with proper evacuation routes, water sources and fire protection.
- Maintaining **Defensible Space** around homes by removing dead and overgrown vegetation.

California arguably has some of the most stringent wildland building codes in the world. Since 2008, new construction in California's wildlands include building materials that are ember-resistant.

Fire Hazard Severity Zones

These strict building codes apply throughout:

- **State Responsibility Area:** Med, High & Very High Zones
- **Local Responsibility Area:** Very High & Local Designated Zones

These zones are mapped to take into account:

- Wind carried embers
- Topography
- Fire history
- Vegetation Type

We are in the process of updating the maps with new technology.

- Update regulations for fire safe development for adequate ingress and egress (road widths, clearances, etc.)
- Review County and City General Plan Safety Elements for adequate wildfire planning
- Track implementation of fire safe design findings that must be made on subdivision maps
- Review the THP exemption for utility clearance and other defensible space laws to ensure consistency between the Board and the CPUC

DEFENSIBLE SPACE ZONES



















Thank you!

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CCI Grants Awarded

- FY 17-18: \$91.5 million awarded
- FY 16-17: \$16 million awarded
- 27 total projects; 240,000 acres

Other data	
Research (# of projects)	9
Biomass Utilization (tons)	1,300,440
Reforestation (trees)	4,523,428

Treatment Activity	Acres
Fuels Reduction	91,987
Prescribed Fire	27,883
Pest Management	24,076
Biomass Utilization	65,784
Reforestation	17,739
Conservation Easement	19,315
Total	246,784

- Update regulations for fire safe development for adequate ingress and egress (road widths, clearances, etc.)
- Review County and City General Plan Safety Elements for adequate wildfire planning
- Track implementation of fire safe design “findings” that must be made on subdivision maps
- Review the THP exemption for utility clearance and other defensible space laws to ensure consistency between the Board and the CPUC
- AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory Report – annual report calculating stored carbon in forests and wood products to provide data to the Board to guide their regulations and policies to ensure the forest sector maintains the forest carbon sequestration goals in the initial AB 32 Scoping Plan (2008).